

**NASA Applied Sciences Gulf Workshop
New Orleans, Louisiana
December 8-10, 2009**

Opening Session

Tuesday, December 8, 2009, 1:00 pm – 3:15 pm

Mr. Gene Goldman, Director, NASA John C. Stennis Space Center
Mr. Lawrence Friedl, Acting Director, NASA Applied Sciences Program
Mr. John Haynes, Program Manager, NASA Gulf of Mexico Initiative
Ms. Lael Butler, Environmental Scientist, EPA Gulf of Mexico Program
Dr. Jeff Privette, Manager NOAA's Climate Data Record Program, National Climatic Data Center
Dr. James Pahl, Manager, Applied Research & Development, Louisiana Office of Coastal Protection & Restoration

Break, 3:00 pm – 3:15 pm

Resiliency Session

Tuesday, December 8, 2009, 3:15 pm – 5:30 pm

Gulf of Mexico Alliance Resiliency PIT Overview, *NASA John C. Stennis Space Center*

Establishing a Prototype Decision Support Tool Using NASA and other Data for the Gulf of Mexico Alliance (GOMA), David Jones, *StormCenter Communications Inc.*

The Application of Remotely Sensed Data and Models to Benefit Conservation and Restoration along the Northern Gulf of Mexico Coast, Maurice Estes, *Universities Space Research Association*

DEMAND: DSS Environment for Modeling of Atmospheric Nutrient Deposition, Udaysankar Nair, *University of Alabama in Huntsville*

Monitoring Coastal Marshes for Persistent Flooding and Salinity Stress, Maria Kalcic, *Science Systems and Applications, Inc.*

Use of MODIS Time Series Data Products to Improve Management of Forest Damage and Recovery from Hurricane Katrina, David Lewis

Subsidence and Land Loss in Southern Louisiana, Timothy Dixon, *University of Miami*

Improved Levee Management via Remote Sensing, James Aanstoos, *Mississippi State University*

An Analysis of Storm Surge Attenuation by Wetlands Using USGS, FEMA, and NASA Data, Patrick Fitzpatrick, *Mississippi State University*

Evaluation of Hurricane Evacuation Routes Resiliency to Storm Damage, Troy Frisbie, *NASA John C. Stennis Space Center*

Gulf Coast Subsidence: Insight for Decision Makers from InSAR, Geodesy, and Geophysical Modeling, Roy Dokka, *Louisiana State University*

Round Table Discussion

Reception

Tuesday, December 8, 2009, 6:00 pm – 7:30 pm, Westin Hotel

**NASA Applied Sciences Gulf Workshop
New Orleans, Louisiana
December 8-10, 2009**

Refreshments

Wednesday, December 9, 2009, 8:30 am – 9:00 am

Habitat Session

Wednesday, December 9, 2009, 9:00 am – 10:45 pm

Gulf of Mexico Alliance Habitat PIT Overview, *NASA John C. Stennis Space Center*

Characterizing Pelagic Habitats within U.S. Gulf of Mexico Coastal Waters, Rebecca Allee, *NOAA*

A Collaborative Geospatial Decision Support System for Managing Coastal River Basins, Ronald Green, *Southwest Research Institute*

Coastal Fire Assessment in the Northern Gulf of Mexico, William Cooke, *Mississippi State University*

Use of NASA Satellite Data to Improve Coastal Cypress Forest Management, Joseph Spruce, *Science Systems and Applications, Inc.*

Aiding Mobile Bay, AL Conservation and Restoration with Landsat Data from 1974-Present, Roberta Swann, *Marine Environmental Sciences Consortium*

Seagrass Health Modeling and Prediction with NASA Science Data, Gregory Easson, *University of Mississippi*

Sustainable Management of Coastal Forest Ecosystems Under a Changing Climate in the Northern Gulf of Mexico, Xingang Fan, *Western Kentucky University*

Assessing Trajectories, Patterns and Stressors in Marsh Loss at the Landscape Level, Michael Kearney, *University of Maryland*

Round Table Discussion

Break, 10:45 am – 11:00 am

Water Quality Session I

Wednesday, December 9, 2009, 11:00 am – 12:00 pm

Gulf of Mexico Alliance Water Quality PIT Overview, *NASA John C. Stennis Space Center*

Multi-model Simulations with Data Assimilation for Harmful Algal Blooms in the Eastern Gulf Of Mexico, Jason Lenos, *University of South Florida*

High-Resolution Subsurface Physical and Optical Property Fields in the Gulf of Mexico: Establishing Baselines and Assessment Tools for Resource Managers, Jason Jolliff, *Naval Research Laboratory*

Remote Sensing to Assess Microbial Water Quality at Beaches and Shellfish Beds, Jay Grimes, *University of Southern Mississippi*

Oil Slick Detection Using NASA Active and Passive Sensors, Sonia Gallegos, *Naval Research Laboratory*

**NASA Applied Sciences Gulf Workshop
New Orleans, Louisiana
December 8-10, 2009**

Development of Sensor Assisted Water Quality Nowcasting and Forecasting Environment for Coastal Beaches, Zhiqiang Deng, *Louisiana State University*

Lunch

Wednesday, December 9, 2009, 12:00 pm – 1:30 pm

Water Quality Session II

Wednesday, December 9, 2009, 1:30 pm – 2:45 pm

Enhancing Estuarine Water Quality Management through Integrating Earth Science Research Results: A Targeted Project for Tampa Bay, Florida, Chuanmin Hu, *University of South Florida*

Establishing Standard Water Quality Criteria Using Satellite Products for Texas, Paul Montagna, *Texas A&M University – Corpus Christi*

Geospatial Synthesis of Chromophoric Dissolved Organic Matter Distribution in the Gulf of Mexico for Water Clarity Decision Making, Eurico D'Sa, *Louisiana State University*

Mapping and Characterization of Seagrass Habitats Using Spacecraft Observations, Susan Bell, *University of South Florida*

Satellite Earth Image Products Applied to the Development of Regulatory Water Quality Standards, John Lehrter, *Environmental Protection Agency*

Remote Sensing Decision Support for Water Quality Assessment and Seagrass Protection and Management in Florida's Big Bend Region, Paul Carlson, *Florida Fish and Wildlife Conservation Commission*

Round Table Discussion

Ecosystems & Nutrients

Wednesday, December 9, 2009, 2:45 pm – 4:10 pm

Gulf of Mexico Alliance Ecosystems & Nutrients PIT Overview, NASA John C. Stennis Space Center

Establishing the Application of High Resolution Satellite Imagery to Improve Coastal and Estuarine Models, Scott Hagen, *University of Central Florida*

Nutrient Linkages between South Florida Rivers and Coastal Habitats: Integrating Water Quality Sampling with Satellite Remote Sensing to Enhance Management, Brian Lapointe, *Harbor Branch Oceanographic Institute at Florida Atlantic University*

Improved Hypoxia Modeling for Nutrient Control Decisions in the Gulf of Mexico (Hypo-G), Shahid Habib, *NASA Goddard Space Flight Center*

Enhancing NASA's COAST Online Application for Agricultural Best Management Practices Decision Support, Katherine Milla, *Florida A&M University*

SANDS - Sediment Analysis Network for Decision Support Project Summary, Sara Graves, *University of Alabama Huntsville*

**NASA Applied Sciences Gulf Workshop
New Orleans, Louisiana
December 8-10, 2009**

A MODIS Based Decision Support Tool for Gulf Coast Salt Marsh Conservation and Restoration, Deepak Mishra,
Mississippi State University

Round Table Discussion

Break, 3:45 pm – 4:10 pm

Invited Speakers

Wednesday, December 9, 2009, 4:10 pm – 5:10 pm

An Overview of NASA Ocean Color Data Products, Chuanmin Hu, *University of South Florida*

The Hyperspectral Imager for the Coastal Ocean (HICO); Sensor and Data Processing Overview, David Lewis,
Radiance Technology, Inc.

No Host Dinner

Wednesday, December 9, 2009, 7:00 pm

Dickie Brennan's Palace Café
605 Canal Street
New Orleans, LA 70130

\$56.00 – cash only, due at Workshop Registration

Refreshments

Thursday, December 10, 2009, 8:30 am – 9:00 am

GOMA Priority Issue Team Breakout Session

Thursday, December 10, 2009, 9:00 am – 10:00 am

- **Water Quality**
- **Nutrients**
- **Ecosystems**
- **Resiliency**
- **Habitats**

Closing Session

Thursday, December 10, 2009, 10:00 am – 11:00 am

- **Reporting Requirements & Logistical Issues**
- **Future Gulf ROSES Solicitations**
- **Q&A from attendees**